

Greenhouse Facilities

Early Microbial Ecosystems Research Group (EMERG)

NASA Ames Research Center



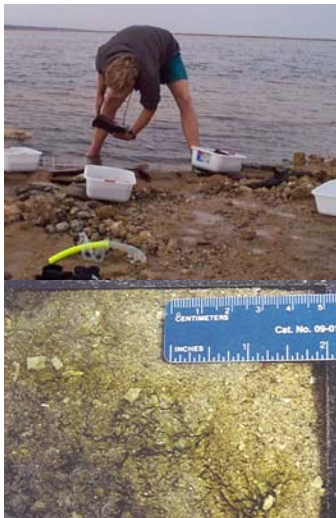
Greenhouses Offer:

- Natural Light
- Realistic Flow Fields
- Natural Solar UV

Used for



Maintenance of
Field Collected
Mats and Growth
of Defined
Communities



EMERG
Early Microbial Ecosystems
Research Group

Experimental
Manipulations

Technology
Development

Microsensors,
Remote
Instrumentation
Collaboratory

Long Term
Monitoring

Detailed Studies
of Mat
Biogeochemistry
with Improved
Access to
Analytical
Instrumentation

Trace Gas
Production and
Consumption
Under “Early
Earth”
Conditions

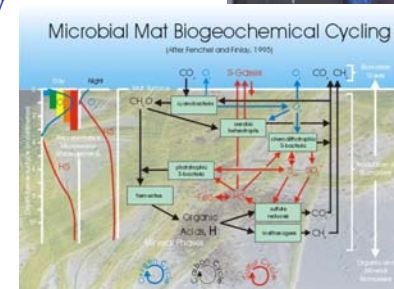
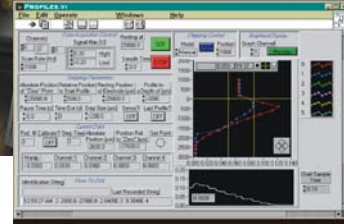
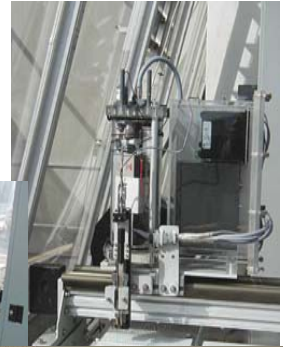
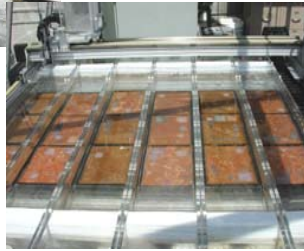
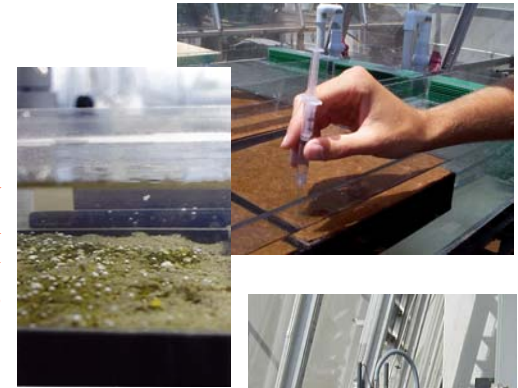
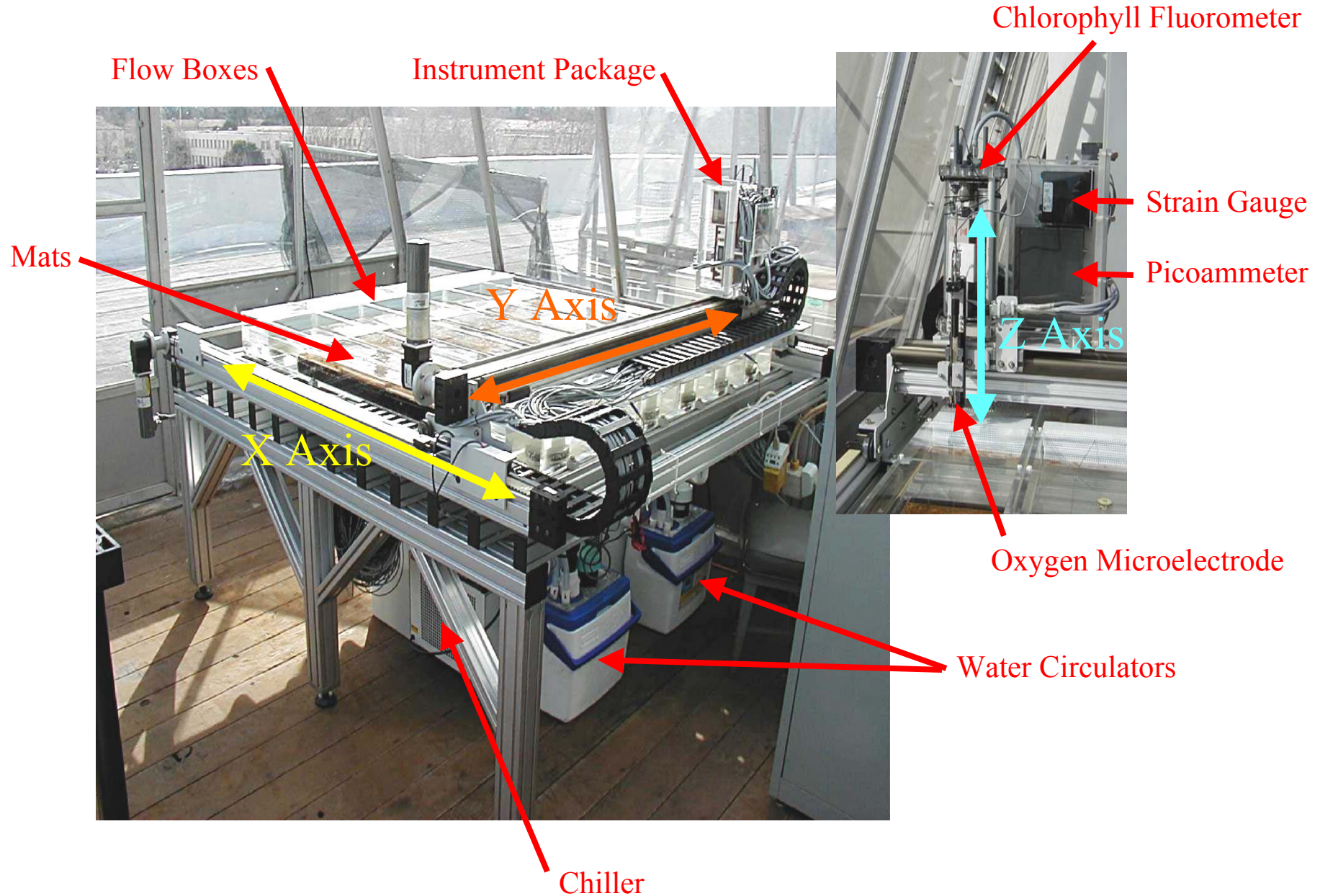
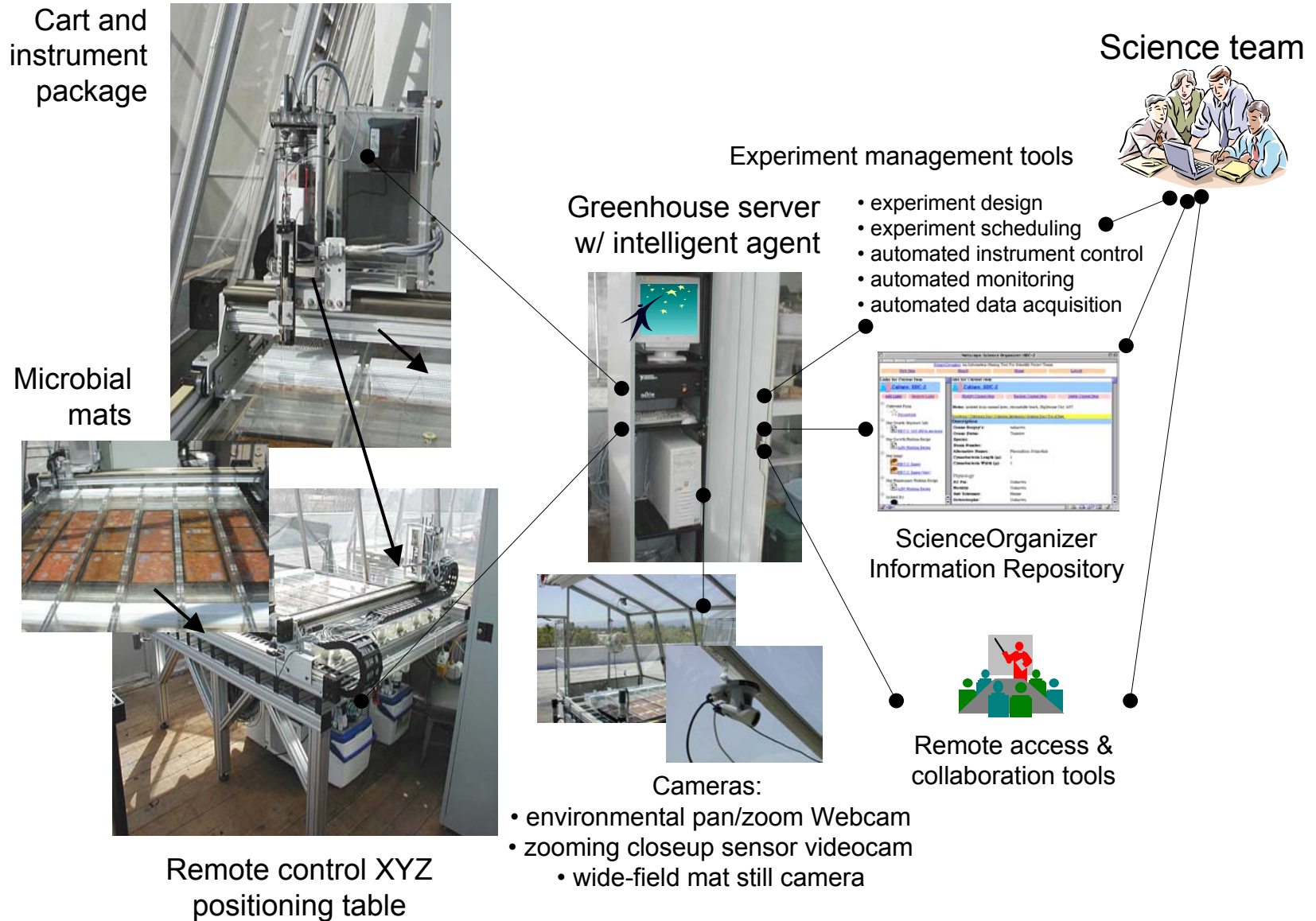


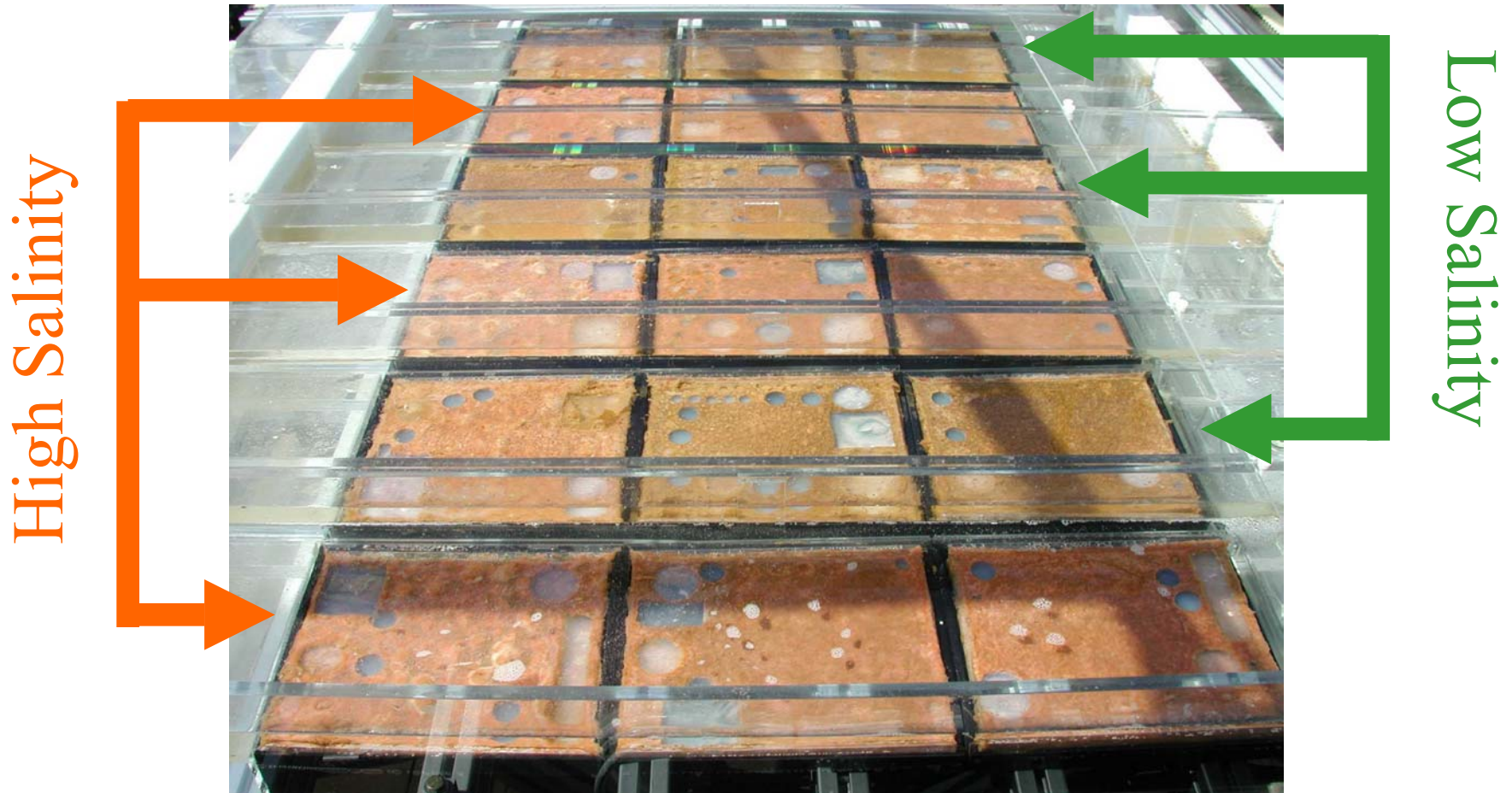
Diagram of the Remotely Operable XYZ Table



Organizational Diagram of the Collaboratory Configuration



Color Changes Observed in Our First Manipulation (Salinity)



Appearance of the mats on 3/29/01. The color difference between high (120 ppt) and low (90 ppt) salinities can be seen. Clear spots on mats are places where samples have been taken.